DIRECT TESTIMONY OF

SHERYL K. SHELTON

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

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Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Sheryl K. Shelton, and my business address is 220 Operation Way, Cayce, South Carolina 29033. I am the Manager of Demand Side Management / Energy Conservation for Dominion Energy South Carolina, Inc. ("DESC" or the "Company").

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND BUSINESS EXPERIENCE.

A. I am a graduate of the University of South Carolina with a Bachelor of Science degree in Biology, Chemistry minor. In 1991, while attending college, I began my utility career as a student intern in Fossil Hydro Operations at South Carolina Electric & Gas Company ("SCE&G"). Upon completing my degree, I accepted a position as a Budget Analyst in Fossil Hydro Accounting. In 1994, I transitioned to a Plant Chemist at the Central Laboratory where I performed standard plant chemistry analysis and became involved with the South Carolina Department of Health and Environmental Control auditing of plant laboratories for coal, natural gas, and hydro generating facilities throughout the SCE&G service

territory. In 2009, I accepted a Senior Analyst position in a newly developed department, Demand Side Management ("DSM"), evaluating energy efficiency programs for residential and non-residential customers. In 2011, I was promoted to Supervisor where, under my direction, we formed a specialized DSM team to handle customer service, rebate processing and develop the necessary program tracking and reporting to meet regulatory requirements. In 2015, I was promoted to Manager, DSM Administration/EM&V. As of April 1, 2022, I assumed the responsibilities of Manager, Energy Conservation, which includes managing the operations of the DSM department.

Q. WHAT ARE YOUR DUTIES WITH DESC?

A. I am responsible for all aspects of the Company's residential, commercial, and industrial electric and gas energy efficiency programs, which constitute DSM programs as that term is used in the statute that governs DSM programs, S.C. Code Ann. § 58-37-10. I manage a team dedicated to the portfolio implementation activities, which includes program management, information technology data tracking, accounting, rebate processing, customer assistance and general administrative responsibilities. My responsibilities include oversight of the development and implementation of program planning models, market characterization and potential studies, cost effectiveness analysis and associated analytics for the portfolio. This includes oversight of the related regulatory filings, ensuring the Energy Efficiency Advisory Group ("EEAG" or "Advisory Group")

meetings are held and oversight of facilitator activities. Additionally, my responsibilities include the detailed analysis of approved and proposed electric and gas DSM programs and incorporating the DSM portfolio into the Company's IRP. My responsibilities further include planning, organizing, and coordinating evaluation, measurement and verification ("EM&V") activities for the DSM portfolio through a third-party evaluator, Opinion Dynamics Corporation ("ODC"). This includes ensuring EM&V data is collected and made available for regulatory review and analysis and reviewing EM&V processes and reports and coordinating all pertinent EM&V activities.

Q. HAVE YOU EVER TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?

Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to give an overview of DESC's 2023 DSM Potential Study and describe how the Company developed its 15-year energy-savings and demand savings forecasts and how we engaged the members of the Advisory Group through the course of that Study and in this IRP.

Q. PLEASE DESCRIBE THE 2023 DSM POTENTIAL STUDY

A. In late 2021, DESC launched a comprehensive DSM potential study to determine the maximum levels of DSM energy sales and demand reductions that DESC can achieve for its customers consistent with cost-effectiveness. Cost

effectiveness is a statutory requirement for DSM programs, and in Order No. 2021-429 the Commission required DESC to use "cost effective, reasonable and achievable" as the standard for evaluating potential DSM savings in future IRPs. DESC's current DSM portfolio is based on the findings of its 2019 DSM Potential Study and 2021 DSM High Case Rapid Assessment. In consultation with the Advisory Group, DESC selected ICF as the third-party provider for the 2023 DSM Potential Study. ICF has conducted numerous potential studies, including DESC's 2019 Potential Study, and is a preeminent designer and implementer of DSM programs with a nationwide inventory of DSM measures and real-world results data.

With input from the Advisory Group, specifically asking them to suggest measures that could be included in the analysis, ICF assessed both the potential and cost-effectiveness of 218 individual energy efficiency ("EE") measures if implemented in DESC's territory. The study evaluated the technical, economic, achievable, and maximum achievable potential of EE programs in the DESC service area over a 15-year forecast period.

Q. PLEASE DESCRIBE THE STAKEHOLDER INVOLVEMENT IN THE STUDY.

A. ICF and DESC consulted with stakeholders through the Advisory Group during each phase of the study. Those consultations included the scope and design of the study, its methodology, customers' home and building characteristics, model load shapes to be used, and the universe of DSM measures that ICF would evaluate.

Between November 2021 and November 2022, DESC and ICF held seven EEAG meetings—more than twice the number of meetings held in an average year.

Also, in consultation with the Advisory Group, DESC chose ODC to undertake a comprehensive market assessment to characterize DESC's customer service territory in terms of the types, ages, and condition of housing and other building stock and energy consuming equipment to provide reliable estimates of the opportunities and barriers for generating savings through DSM programs. ICF's evaluation considered ODC's market assessment and previous evaluation results obtained through DESC's current portfolio of DSM programs as verified by ODC, who also serves as the EM&V evaluator for the current programs.

Q. PLEASE SUMMARIZE THE CONCLUSIONS OF THE 2023 DSM POTENTIAL STUDY.

A. ICF identified three DSM scenarios that capture potential levels of energy sales reductions over the forecast period: a medium case, a high case and a low case.

The Medium Case, also referred to as the achievable potential, assumes that DESC offers the revised programs identified in the 2023 DSM Potential Study, including all the measures determined by ICF to meet cost effectiveness standards if implemented in the DESC's service territory. The 2023 DSM Potential Study based the program expansion rates and implementation schedules for the expanded suite of measures on the current DSM portfolio of programs as a starting point and assuming normalized growth rates for participation and program budgets, including

incentives and non-incentives, in the months following the implementation of expanded programs or measures. The 2023 DSM Potential Study based participation and energy saving rates on the findings of the ODC market characterization study, historical DSM implementation results, as verified by Commission-required annual EM&V studies, and utility benchmarking.

Under the Medium case, ICF determined that DESC could achieve 0.51% gross energy sales reduction due to EE programs in 2024, based on challenging but reasonable assumptions as to implementation scenarios and obstacles, EM&V results, customer response, and resulting energy savings while considering the effect of influences outside of the Company's control like the field staffing, pandemic and supply chain disruptions of recent years. Each program has unique issues and their effects have been considered on a program-by-program basis.

Under the High Case, which is the maximum achievable potential, ICF again assumed the expanded suite of cost effective measures was pursued, but did not take into account the same degree of practical limitations it considered under the Medium Case. Under the High Case, ICF determined that the gross maximum energy sales reduction that DESC could achieve consistent with cost-effectiveness is 0.74% of sales. ICF based this conclusion on several factors, which included benchmarking the performance of comparable programs in similar regions, climates, and regulatory jurisdictions to DESC. The High Case also assumed the most aggressive marketing scenarios, customer acceptance rates, and energy savings levels that

could be reasonably supported. ICF determined that any scenario higher than the maximum achievable scenario would be hypothetical because it would include measures that are not cost effective, and participation rates beyond those that could be reasonably assumed.

The Low Case assumes that DESC achieves 90% of the levels described in the Medium Case as a result of more unfavorable conditions than those assumed in the Medium Case which could arise through economic recession, waning of customer interest, staffing shortages, supply chain disruptions and other implementation problems. Under the Low Case, ICF determined that DESC could achieve a 0.46% gross annual reduction in sales.

The analysis supporting these conclusions is described in more detail in the testimony of Mr. Durkee.

Q. DID DESC EVALUATE THE COST EFFECTIVENESS AND ACHIEVABILITY OF DSM PORTFOLIOS REACHING ANNUAL ENERGY SALES REDUCTION LEVELS OF 1%, 1.25%, 1.5%, 1.75% AND 2.0%?

A. Yes. Following the development of the High Case, ICF developed the Commission-required scenarios. As required by Commission Order No. 2020-832, DESC instructed ICF to evaluate the cost effectiveness and achievability of DSM portfolios reaching annual energy sales reduction levels of 1%, 1.25%, 1.5%, 1.75%, and 2.0%. ICF completed the DSM Potential Study and used the maximum

achievable scenario as the starting baseline. Then, ICF broke the evaluation into two components. The first step was to assess achievability. ICF evaluated the number of customers required to participate in each program to achieve savings levels above 0.74% annual gross savings net of opt out. Based on the market study and direct experience with program design and implementation in DESC's service territory and elsewhere, ICF concluded that the participation levels required to achieve savings levels above 0.74% were not achievable in DESC's service territory. To achieve a 1%, 1.25%, 1.5%, 1.75% and 2% savings rate, the rates of participation would have to be artificially inflated beyond levels that had been achieved in the field or could rationally be supported.

To address the second part of the analysis, cost effectiveness, ICF developed cost curves using utility benchmarking to determine the hypothetical costs that would be associated with these artificially inflated participation levels, which Mr. Durkee discusses in his testimony. With each scenario increasing energy savings, the cost effectiveness of most programs declined. In some cases, the programs were cost effective at the hypothetical participation rates, but these rates remained unachievable in DESC's service territory. These scenarios and the process steps completed by ICF are included in Appendix C of DESC's 2023 IRP as well as the 2023 DSM Potential Study.

ICF did not find a 1% case, or any higher case, to be achievable and found that energy sales reductions beyond 0.74% would require non-cost-effective

measures and unreasonable program participation assumptions. Among the facts supporting this finding are that DESC's DSM programs are now in their thirteenth program year, and many of the easy-to-reach customers and readily available savings have been captured. In addition, increasingly stringent federal and state energy efficiency standards for lighting, HVAC units, appliances, and electrical equipment, and improved building construction standards limit the additional energy reductions that can be generated through DSM programs or increase the cost of obtaining them. As Mr. Perricelli can confirm, DESC has accounted for these economy-wide increases in energy efficiency through the load forecasts used in the 2023 IRP, but they nonetheless limit DSM potential.

Q. WHAT ARE THE CURRENT EM&V RESULTS OF DESC'S DSM PORTFOLIO?

A. DESC intends to expand its DSM programs significantly based on the 2023 DSM Potential Study. But as a point of comparison, in the last evaluated program year, which ended November 30, 2021, PY11, DESC achieved a reduction in total energy sales of 0.40%. All DSM scenarios discussed here increase savings, even the Low Case, but it is important to recognize that the 0.40% result is not the result of the programs not being effectively delivered or failing to achieve high levels of participation. In PY11, participation exceeded 179% of forecast. Despite this admirable level of participation, DESC was still not able to achieve the energy savings that had been forecasted due to lower levels of energy savings achieved

from the measure mix that customers implemented. All three scenarios (Low, Medium and High) as provided in the 2023 DSM Potential Study have forecasted higher energy savings values than the latest EM&V results.

Q. DID THE 2023 DSM POTENTIAL STUDY EVALUATE DEMAND RESPONSE PROGRAMS FOR BOTH RESIDENTIAL AND COMMERCIAL CUSTOMERS?

A. Yes. As part of the 2023 DSM Potential Study, ICF also completed a comprehensive evaluation of Demand Response ("DR") programs for both residential and commercial customers with an emphasis on decreasing the winter peak. The roll out of DESC's Automated Metering Infrastructure ("AMI") is providing a direct two-way wireless connection between the Company and the customer's meter that will make it possible for DESC to offer DR programs to include its residential and eventually small and medium general service customers. DESC has several longstanding and successful DR programs for large general service customers, which will remain in place. ICF's analysis in the 2023 DSM Potential Study determined that there are eight DR programs that are potentially cost-effective on DESC's system in certain configurations. Of these, Time of Use Rates ("ToU"), Critical Peak Pricing, and Peak Time Rebate are potential residential programs with high levels of cost effectiveness and broad potential applicability. They involve motivating demand reductions through price signals during peak periods. A Smart Thermostat program for residential customers also scored well.

ICF modeled the effects of bundling these programs for each of the three principal customer segments. It modeled the ToU program both on an opt-in and opt-out basis and modeled sensitivities for all programs based on high, medium, and low assumptions concerning participation rates.

Q. HOW DO YOU MEASURE THE POTENTIAL BENEFITS OF DR PROGRAMS?

A. Unlike most other DSM programs which primarily seek to reduce energy consumption, DR programs seek to reduce peak demand on the system, and for that reason, DR programs are principally measured on their ability to reduce system peak. ICF forecasted that under an opt-in scenario for ToU, an achievable reference case suite of DR programs could reduce winter peak demand by 4.74% in 2025, rising to 9.47% in 2037. ICF also modeled an opt-out scenario, DESC is less likely to pursue offering programs under this model based on customer comments collected during the ODC Market Study which indicates a strong customer bias against this approach.

Q. WHAT ARE THE NEXT STEPS IN PROPOSING AND IMPLEMENTING DR PROGRAMS?

A. DESC's DR programs will be based on one year of usage data after completion of AMI roll out to establish a baseline and will be tariff based, so Commission approval will be required for rates changes. Achieving the forecasted results will depend largely on participation levels and customer response to the price

and other signals provided. As a result, the success of the DR program roll out will depend on availability of skilled implementation professionals, timely regulatory approval, favorable customer acceptance rates, and other factors.

Q. HOW WAS THE 2023 DSM POTENTIAL STUDY INCLUDED IN DESC'S 2023 IRP?

A. As Mr. Neely testifies, the results of the 2023 DSM Potential Study are included as inputs to the 2023 IRP modeling representing Low, Medium, and High Case DSM Scenarios. The Reference Market Scenario uses the Medium DSM case as the most likely scenario to be achieved. As a comparison, two Build Plans were created as sensitivity cases to model the impact of the high and low DSM cases in scenarios that otherwise align with the Reference Market Scenario. These are the High DSM Build Plan and the Low DSM Build Plan. Additionally, DESC modeled two DR programs, Residential ToU and Smart Thermostat Opt-In, in the 2023 IRP as resource options that the PLEXOS model could select. Opt-in was chosen for the Smart Thermostat program based on customer acceptance and flexibility considerations.

Q. WHAT IS THE COMPANY'S SHORT TERM ACTION PLAN AS IT RELATES TO THE 2023 DSM POTENTIAL STUDY?

A. The specific short-term actions the Company intends to take related to the 2023 DSM Potential Study are to begin working on the individual DSM/EE 5-Year Program Plans in collaboration with the Advisory Group which will include:

1. Details of marketing efforts
2. Customer engagement techniques
3. Design of program delivery
4. Incentive/rebate amounts

In addition, DESC will timely report any changes to the Commission on the development of any individual EE program plan and provide updates on the implementation timeline of any program modifications or new measures within existing programs through Commission filings in 2023 and 2024.

Additionally, while pending the complete installation of AMI meters, DESC will continue to collect data to tailor the demand response programs that it will propose for residential customers, undertake the process of selecting the DR program(s) to implement in its service territory and will timely report the development of these details to the Advisory Group.

Q. WHAT ARE YOU REQUESTING THE COMMISSION TO DO?

A. I respectfully request the Commission to affirm that the 2023 DSM Potential Study satisfies the requirements of all prior Commission orders, including Order No. 2021-429. Specifically, that for IRP and DSM planning purposes, based on current market and other data, a reasonable estimate of the achievable level of energy demand reduction to be anticipated from cost effective DSM programs on DESC's system is 0.51%, while the maximum achievable reduction in future energy growth on DESC's system assuming consistently favorable conditions and high

customer acceptance and participation levels is 0.74%, and an appropriate low DSM case is 0.46%.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.